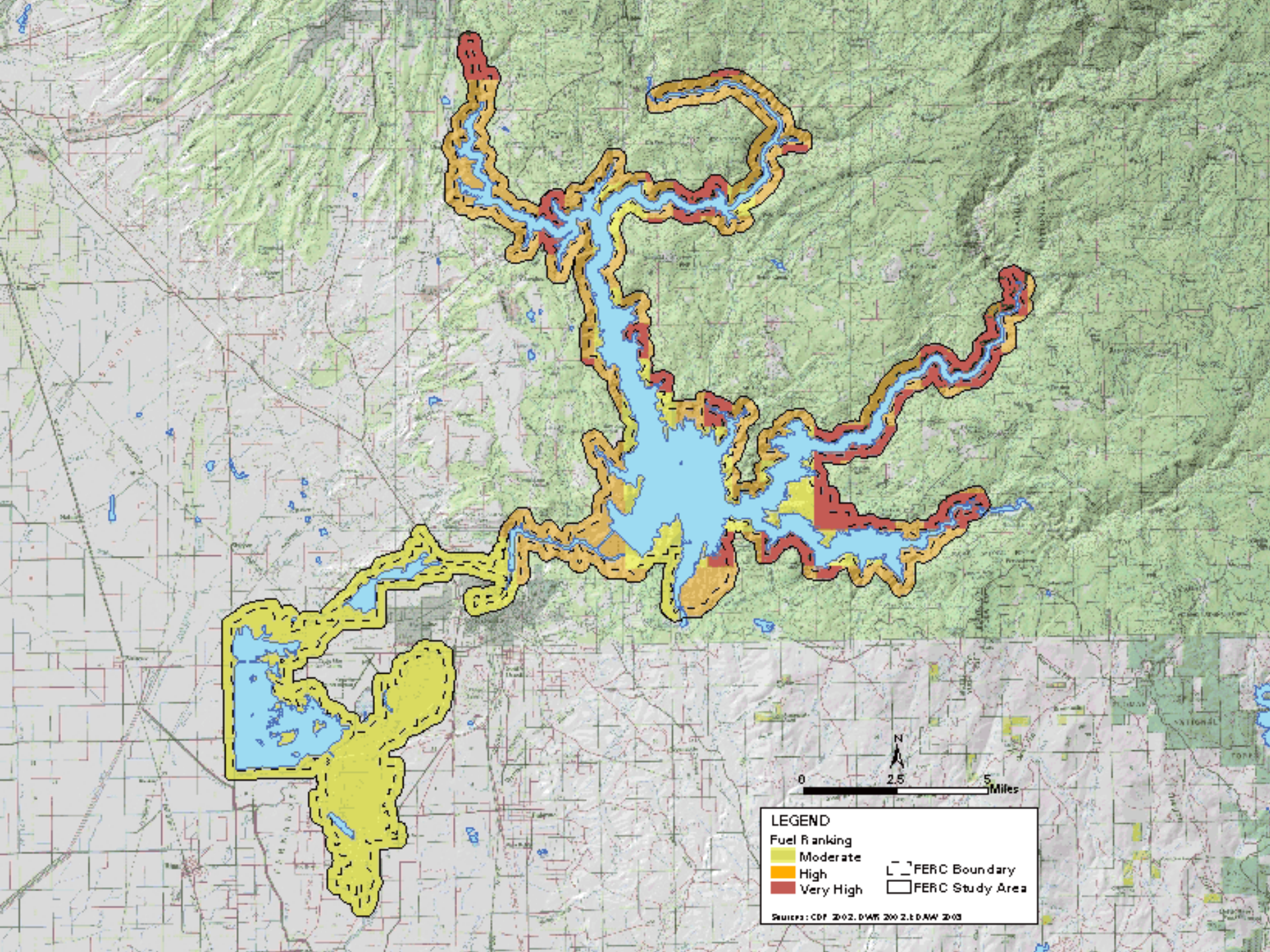

N
0
2.5
5
Miles
LEGEND
Fuel Ranking
Moderate
High
Very High
FERC Boundary
FERC Study Area
Sources: CDF 2002, DWR 2002, DAW 2003

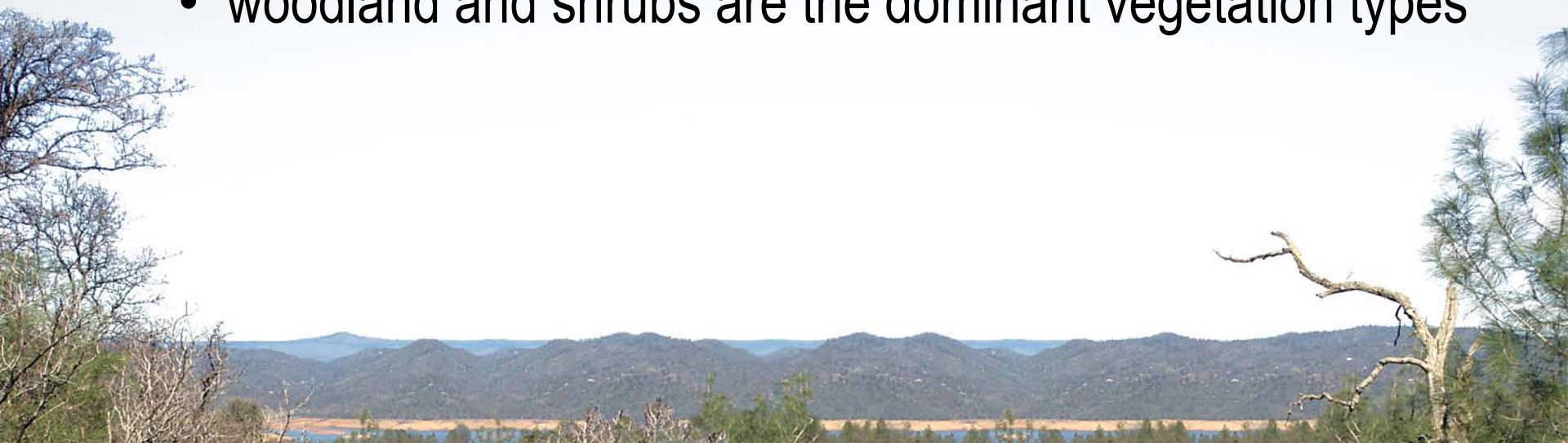
CDF Fuel Hazard Model

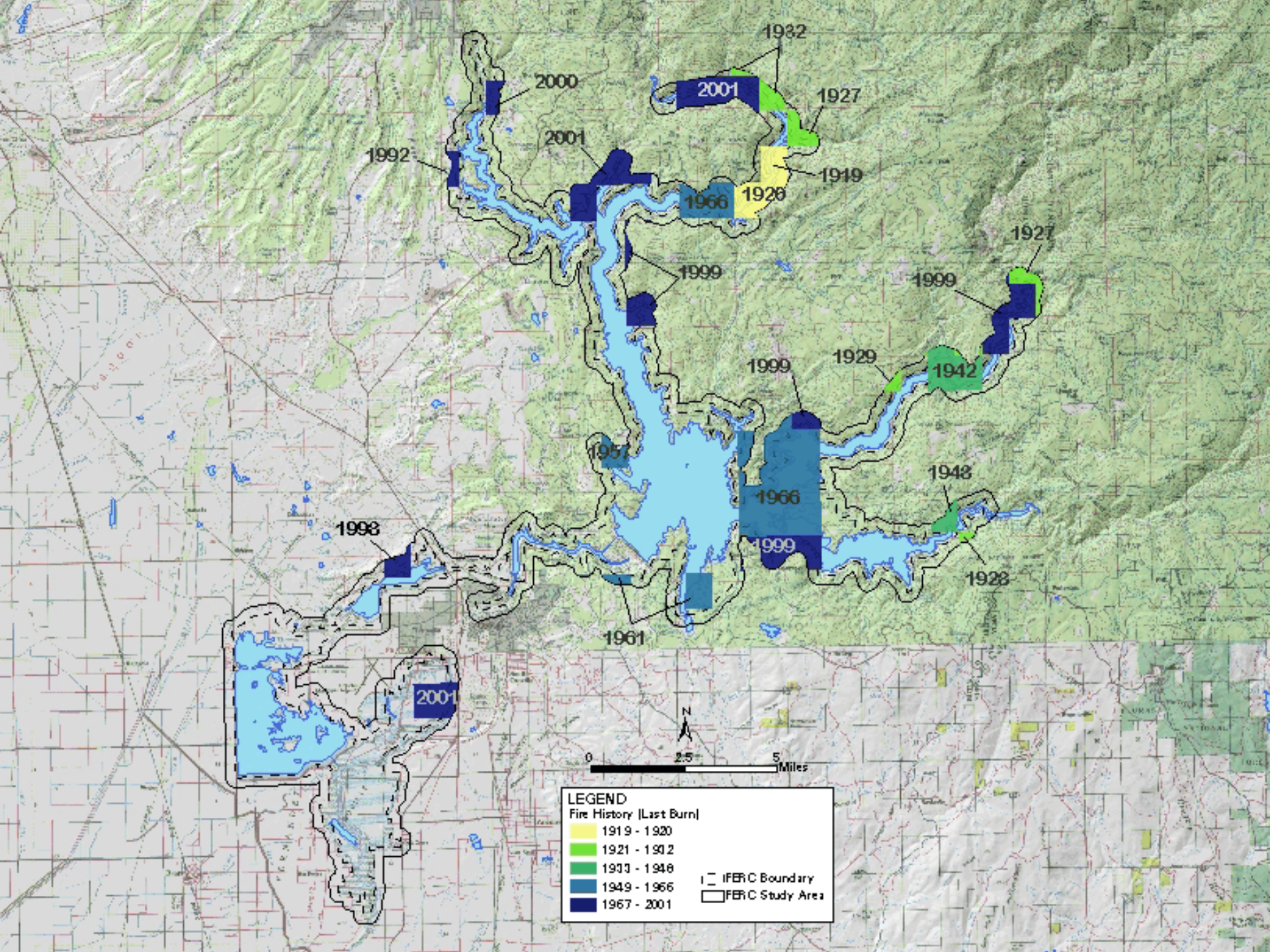
Most of the study area is classified as having a moderate fuel hazard rank

Area	Fuel Hazard Classification (percent of total area)		
	Moderate	High	Very High
Lake Oroville	22	28	15
Diversion Pool and Thermalito Forebay	7	4	-
Thermalito Afterbay	12	-	-
Bypass Reach and Oroville Wildlife Area	12	-	-
Total	53%	32%	15%

CDF Fuel Hazard Model

- Areas of very high fuel hazard are primarily located along the eastern edge of the lake, including areas on the south and middle forks, and along the lower and upper north fork.
  - topographic slope increases
  - woodland and shrubs are the dominant vegetation types



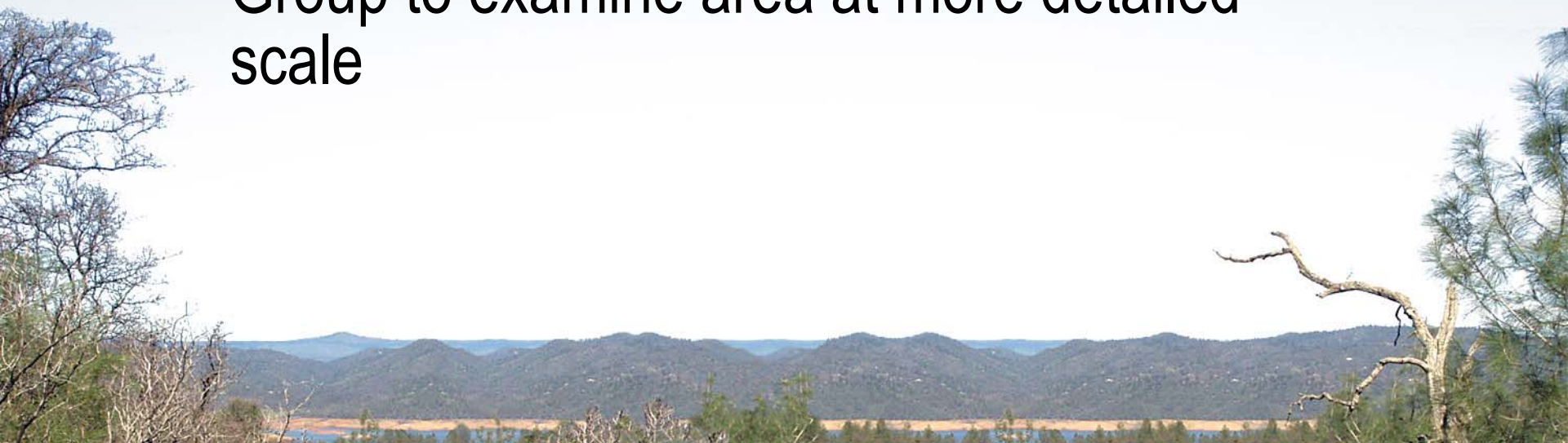

1932
2000
2001
1927
2001
1992
1919
1966
1926
1927
1999
1999
1929
1942
1999
1957
1948
1966
1998
1999
1928
1961
2001
N
0
2.5
5
Miles
LEGEND
Fire History (Last Burn)
1919 - 1920
1921 - 1932
1933 - 1948
1949 - 1966
1967 - 2001
FERC Boundary
FERC Study Area

Report Outline

- Purpose and need for the study
- Study objectives
- Background on fuel loading issues in California
- Existing fuel load conditions in the FERC study area
- How we will evaluate fuel hazards for the project
- Fuel load reduction techniques
- Next steps

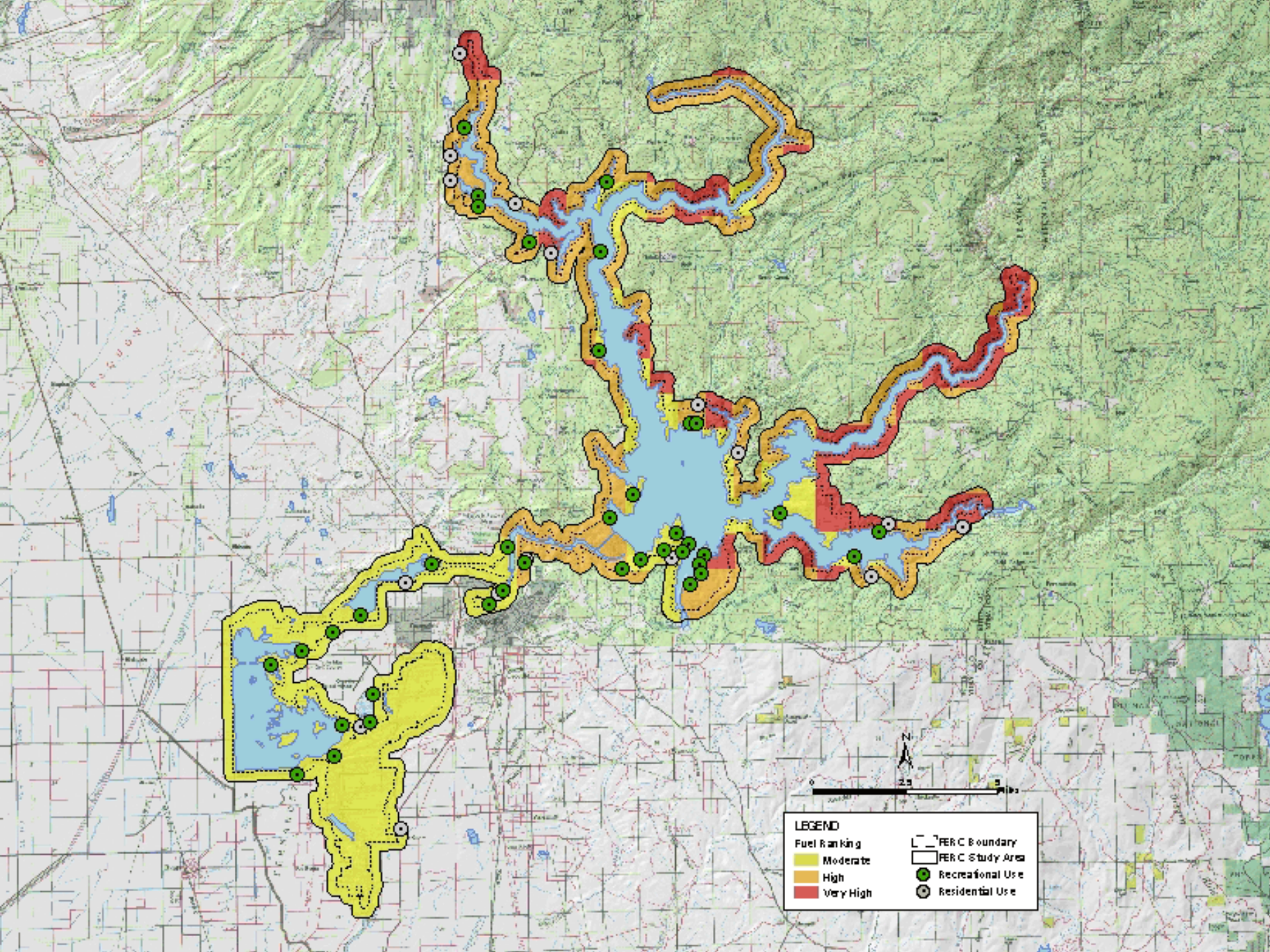
Approach to Fuel Hazard Evaluation for the Project

- Identify areas of concentrated use
- Determine overlap of these areas and very high fuel hazard rank
- From this subset, use vegetation classification maps produced by Environmental Working Group to examine area at more detailed scale



Areas of Concentrated Human Use

- Recreation areas: campgrounds, day-use areas, boat launches, trail access
- Residential areas: e.g., Kelly Ridge, Canyon Creek, south of Paradise, South Fork


N
0
2.5
5
Miles
LEGEND
Fuel Ranking
Moderate
High
Very High
FERC Boundary
FERC Study Area
Recreational Use
Residential Use

Environmental Working Group Vegetation Classification

- More detailed mapping than CDF model
- Vegetation type and density classified using WHR system
- Does not include ladder or crown fuels information, or other variables used in CDF Model
- However, data can be used to:
  - refine the fuel hazard evaluation
  - help determine appropriate fuel reduction techniques

Environmental Working Group Vegetation Classification

Report Outline

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Prescribed Burn

- Ignited by management to meet objectives
- Contained by fire lines
- Maintains dominant vegetation and structure
- Targets elimination of shrubs and trees up to 6” DBH
- Controls weeds, promotes nutrient cycling, and improves wildlife habitat

Pile Burn

- Removed materials are piled and burned
- Eliminates shrubs and trees up to 6” DBH
- Reduces surface concentration and ladder fuels

Mastication

- Grinds fuel into mulch and presses into ground
- Clears brush, shrubs, and trees up to 10” DBH

- Used to achieve crown separation and desired canopy cover

Thinning

- Removes trees to achieve optimum spacing (16-22’)
- Removes biomass from stand to achieve crown separation and desired canopy cover
- Targets trees up to 6” DBH, but occasionally larger

Yarding

- Stores removed trees in a central location until a later time when marketable
- Helicopters are used in steep grade areas

Chipping and Multicutting

- Leaves cut material in place onsite
- Grinds or chops material into mulch or groundcover

Disking/Mowing

- Quick methods to clear and reduce fuel biomass
- Turns vegetation into the topsoil
- Mowing leaves roots in place
- Used in flat terrain and grassy vegetation

Grazing

- Livestock removes vegetation
- Goats are effective on steep slopes
- Animals are kept in by temporary fencing

Herbicides

- Chemicals that kill or inhibit germination of plants
- Applied to stems, surface of stump, soil, or foliage

Defensible Fuel Profile Zones (DFPZ)

- Provide a network of corridors that inhibit fire spread
- Generally ¼ mile wide, depending on constraints
- Provide a safe location to facilitate fire suppression
- Involves thinning surface fuels, ladder fuels, and canopy closure

Community Defense Zones (CDZ)

- Located in urban interface areas near forested areas
- Reduces threat of wildfire spread
- High priority to protect urban areas
- Local involvement is important for success

Fuel Reduction Zones (FRZ)

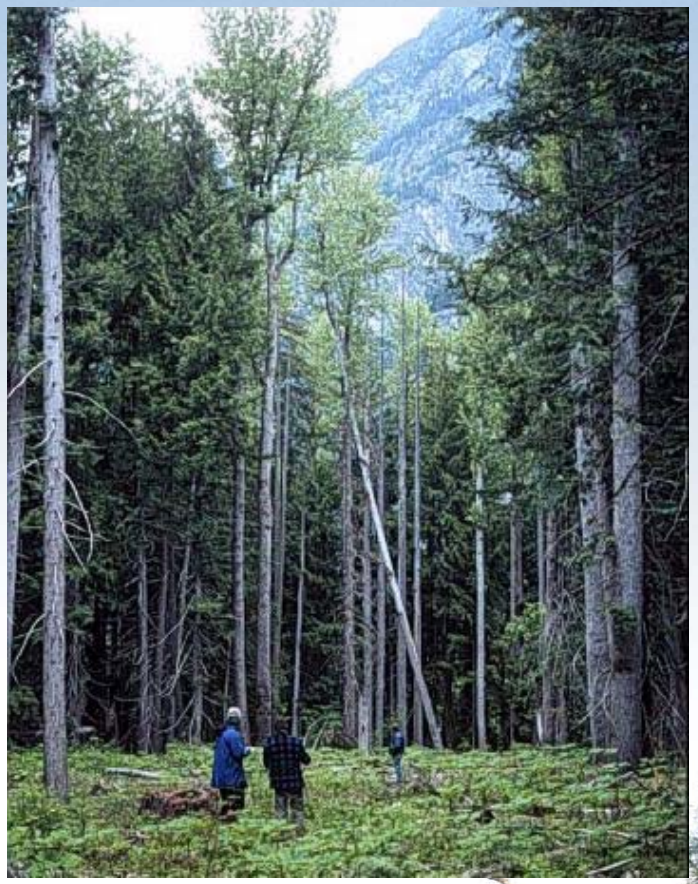
- General area of fuel treatment
- Treated after DFPZs and CDZs are implemented
- Reduces surface and ladder fuels
- Provides canopy separation

Strategically-placed Area Treatments (SPLAT)

- Strategically placed blocks of land (50 -1,000 acres)
- Prevent fire from spreading from bottom of slope to top of ridge
- Reduces continuous areas of hazardous fuel loads

Group Selection

- Maintain a sustainable multi-story forest structure to improve fire resistance
- Average rotation age of 175 years
- Create ½ to 2-acre groups
- Preserves and promotes existing large trees



Next Steps

- Detailed analysis of specific areas within very high fuel hazard
- Evaluate fuel load reduction strategies and treatments, with input from other working groups
- Provide recommendations for specific areas
- Final report due June 2003